SOME NEW PARASITIC HYMENOPTERA. BY H. L. VIERECK, PHILADELPHIA.

Hammaniella relativa, n. sp. — Face and dorsum subopaque, punctured, front opaque, the pleura more shining, longitudinal raised line on metapleura distinct, terminated abruptly, the mesothorax not appearing sharply truncate. The longitudinal medial lines on metanotum converging.

Z.—Length 14 mm. Clypeus with a few punctures, somewhat shining, transversely impressed, anteriorly though not strongly. closely punctured, front opaque. Cheeks impunctate on the eye margin, otherwise with distinct, small, separated punctures, shining malar space punctured, opaque. Dorsulum almost opaque, the punctures tolerably small, closely arranged. The scutellum more strongly punctured. Mesopleura shining, with well separated, to smaller closer punctures. Metanotum with converging, crude, longitudinal medial carinæ becoming obsolete before the apical margin, transverse carina strong. Metapleura separated from the metanotum by a distinct raised line, which stands out prominently, being margined on each side by a more or less distinct channel. Wings subhyaline, with a dullish cast. Areolet imperfectly trapezoidal in form, the petiole shorter than any of its sides, one-half of the curved and longest side of the areolet, one-half of the second recurrent nervure and a short distance of cubito-discoidal nervure, hyaline; stigma and nervures almost uniformly light brown, base of the wings yellow. First dorsal segment strongly punctured, the spiracles distinctly produced, the succeeding dorsal segments becoming less and less punctured, to almost smooth.

Black: face, clypeus and mandibles excepting apex, four anterior femora, tibiæ and tarsi, a pointed mark on anterior part of the dorsum, two dots on scutellum, extreme base and apex of posterior femora and the posterior tibiæ excepting apex, ochraceous. Tegulæ, one spot aside and below them, coxæ and trochanters of four anterior legs, part of posterior coxæ and trochanters, yellow. On the posterior legs the greater part of femora, apex of tibiæ and all of tarsi are more or less dark brown. Apex of first dorsal segment somewhat claret-brown, the second, third, fourth and greater part of fifth mostly ferruginous.

Type: Coll. Am. Ent. Soc., Phila.

Type locality, New Jersey.

Two males; the co-type from Massachusetts, has a length of 12 mm.

The Massachusetts specimen was cited under the description of Lampronota varia, Cress. (Trans. Am. Ent. Soc., III., 164, \$\delta\$), as a variety. Varia, however, is a quite constant species, a series of twelve specimens showing no great extremes either in sculpture or coloration. The metathorax of H. relativa is very distinct from that in varia, which lacks longitudinal lines, and is more finely and uniformly sculptured otherwise. The yellowish cast of the wings and yellowish abdominal ornamentation is also characteristic of varia, and offers a good superficial difference for separating these two species.

Nadia apalachia, n. sp.—Head and thorax more or less finely and closely punctured. Mandibles heavy and incurved. Abdomen finely sculptured. Arcolet sessile.

&.-Length 10.5 mm. Clypeus with a few strong punctures, elevated transversely. Face closely, indistinctly punctured, opaque, front also opaque, punctures well separated. Cheeks somewhat shining, minutely sculptured and with sparse punctures. Mandibles heavy, incurved rather strongly. Flagellum thirty-four jointed. The superior half of propleura distinctly punctured, somewhat shining, the inferior half obscurely sculptured, opaque. Punctures of dorsum very close anteriorly, more separated posteriorly, from opaque to faintly shining. Scutellum arched, somewhat impressed on each side, closely punctured. Mesopleura with an abbreviated longitudinal raised line anteriorly, not so distinct, the integument punctured somewhat like dorsulum, the punctures closer and finer below than above. Metathorax gently rounded, almost uniformly, very closely punctured. The division between the metanotum and metapleura only indicated by a very faint impression. Wings hyaline, with a faint vellowish cast. The first and second transverse cubiti uniting on the radius, forming an acute angle. Stigma and nervures almost uniformly light brown. First dorsal segment opaque, with fine, close punctures, the spiracles not strongly protuberant, the remaining dorsal segments more finely sculptured, the apical ones becoming shining. Almost uniformly pubescent, abdomen sericeous. Black: mandibles except base and apex, clypeus, face, part of the scape, a pointed mark on anterior margin of dorsulum, base of the wings, tegulæ, a spot aside and below, a spot on scutellum, four anterior legs more or less, apex of posterior coxæ, apex of femora, the tibia excepting apex (more or less), and tarsi vellow. Part of posterior trochanters and greater part of femora deep brown. Flagellum, apex of first and all of second, third and fourth dorsal segments, ferruginous.

Type: Coll. Am. Ent. Soc., Phila.

Type locality, Connecticut.

Two male specimens; in the co-type there is a transverse, median black belt on the second dorsal segment.

Cidaphurus Cressonii, n. sp.—Head and thorax opaque, spine on scutellum rudimentary. Wings subfuscous. Colour pattern much like in Cidaphurus superbus.

Q.—Length 13.5 mm. Clypeus moderately emarginate, slightly impressed medially, sparsely punctured. Face indistinctly sculptured. punctures separated and distinct on a longitudinal median line, to the sides indistinct, and forming faint ripples. Cheeks more shining and with sparse minute punctures. First joint of the flagellum about as long as the following two united. Dorsulum closely punctured, the punctures closer and finer posteriorly, a somewhat shining line extending from the anterior border to the middle, medially. Mesopleura with regular separated punctures. Scutellum shining, closely punctured, spine rudimentary. Metanotum coriaceous. Superior posterior angle margined laterally. Metapleura closely punctured, somewhat shining. Median and marginal cells subfuscous, the rest of the cells paler. Stigma and costal nervure pale, the other nervures brown, second cubitus basally and first and second recurrent nervures apically interrupted by a transparent space, first and second cubitus uniting on the radial nervure. second recurrent nervure received by the areolet before the middle. Abdomen shining, polished apically, first segment closely punctured, the punctuation of succeeding segments sparser. Head yellow; malar space, a line from clypeus to insertion of antennæ, and branching out behind insertion, a line on vertex from eye to eye, and occiput, black or nearly so; scape behind and flagellum dark brown. Anterior and posterior margins of prothorax, a loop on each side of dorsulum, tegulæ, a line below, nearly one-half of mesopleura, scutellum, greater part of metathorax, apical border on first, second, third and greater part of remaining dorsal abdominal segments, greater part of four anterior legs, apical trochanter, and basal half of tibiæ in posterior legs, more or less yellow. A broad median belt extending more than half way back on dorsulum from the anterior margin, mesopleura posteriorly and metanotum anteriorly, and base of first dorsal abdominal segment, black.

Related to Cidaphurus superbus, Cress.

Type: Coll. Am. Ent. Soc. Type locality, Massachusetts.

One female specimen. I take pleasure in naming this fine species after Mr. F. T. Cresson

AN ABERRATION OF ACTIAS LUNA. BY A. RADCLIFFE GROTE, HILDESHEIM, GERMANY.

My friends have not always forgotten me, but have occasionally sent me live Saturnian chrysalids, spun up no doubt with the intention of the insect to emerge in America. Instead, the poor deluded creatures appeared as moths in my German room, allowing me to deceive myself for the moment that I was at home. Cynthia, promethea, cecropia, polyphemus, io and even imperialis, came out just as in America. The only difficulty I had was with my few cocoons of luna, the moths in some cases failing to expand their wings. But, if my memory does not fail, this accident happens also more especially with luna in the breeding cage at home. Among the examples which emerged here is one small male, expanding 78 mil., which is the most curious example of the species I remember to have seen. The wings are almost perfectly expanded, a little unevenness of the costa of the right primary, which is somewhat concave, and a slight crumpling of the costal region of both secondaries, are traces of retarded development; the "tails" are fully out. The eye spot on the left primary is interlined with red, and the spot itself is connected by a reddish-purple bar with the purple costal margin. On the right primary the suffusion of the eye spot with purple is entire, and a wider reddish-purple bar fuses it with the costal band. This bar is finely edged with black outwardly and gives the appearance of the eye spot being distorted. On the outer margins the reddish terminal band is very distinct (var. dictynna). But the most curious feature is the appearance over the eye spot of the right secondary (the wings on the right side are the more abnormal) of a straight purple bar, intersecting the eye spot over the middle and projecting somewhat before and behind it. The eye spot on the left secondary is normal, and there is no other apparent deviation, except that on the under surface all the four eye spots are suffused with reddish-purple. There are some blackish discolorations on the hind wings, accidentally caused, I think, by body fluids.

I have exhibited the specimen at Frankfort and at other entomological meetings here, but the species not being well known, it excited but a passing interest. I would have sent the specimen to America, but hope

to live to bring it myself.